

What is claimed is:

- 1        1. An advertising method comprising the steps of:
  - 2              the advertiser transmitting address information for providing services of a
  - 3              predetermined advertisement to a server;
  - 4              the server assigning index information to the address information and storing
  - 5              the address information and index information; and
  - 6              converting the address information or index information into a code image,
  - 7              which can be physically or electronically represented, by encoding the address
  - 8              information or index information using an encoding algorithm provided from the
  - 9              server.
- 1        2. The advertising method of claim 1, further comprising the step of:
  - 2              distributing the code image in a printed state on a medium, in the form of a
  - 3              computer readable electronic file, in a state displayed on a screen, or in a state
  - 4              which can be input through an optical apparatus.
- 1        3. The advertising method of claim 1, wherein the code image includes a  
2              data area formed of at least one or more data cells each of which is represented by  
3              colors or shades according to the content of information to be encoded.
- 1        4. The advertising method of claim 3, wherein the code image further  
2              comprising at least one or more among:
  - 3              a parity area, which is formed of at least one or more parity cells, for
  - 4              providing parity information for confirming whether or not the colors or shades read
  - 5              from the data cells are correctly recognized during decoding;
  - 6              a reference area, which is formed of at least one or more reference cells, for
  - 7              providing base colors or base shades for determining the colors or shades of data
  - 8              cells formed in the data area; and
  - 9              a control area, which is formed of at least one or more control cells, for
  - 10             representing commands or services which can be provided by the information
  - 11             represented in the data area.

1       5. The advertising method of claim 3, wherein in converting characters or  
2 numbers into an image to be represented in a cell in the data area, a pattern  
3 including a vector line as well as colors or shades is used, or colors or shades are  
4 differently represented after dividing a cell horizontally, vertically, or diagonally.

1       6. An advertising method comprising the steps of:  
2           converting a code image related to an advertisement into computer readable  
3 code data;  
4           decoding the code data by a decoding algorithm and extracting code  
5 information contained in the code image; and  
6           executing a service program according to the code information and providing  
7 services preset for the advertisement.

1       7. The advertising method of claim 6, wherein the code image is an  
2 image formed of shapes, colors, patterns, or their combinations generated by  
3 converting one or more characters or numbers contained in the code information  
4 according to a predetermined code conversion table which maps each character  
5 and number to a predetermined color or shade.

1       8. The advertising method of claim 6, wherein the code information  
2 includes a network address related to the advertisement and service information  
3 related to services which can be provided by the network address.

1       9. The advertising method of claim 6, wherein the code information  
2 extracting step further comprises the sub-steps of:  
3           installing a decoding program to a user computer; and  
4           the user computer decoding the code data using the decoding program and  
5 extracting code information contained in the code image.

1       10. The advertising method of claim 6, wherein the code information  
2 extracting step further comprises the sub-steps of:  
3           transmitting the code data from the user computer to the server;

4           the server decoding the code data using the decoding program and extracting  
5       code information contained in the code image; and  
6           transmitting the code information from the server to the user computer.

1           11.   The advertising method of claim 6, wherein the code information  
2       extracting step further comprises the sub-steps of:  
3           transmitting index information to the server if the code information includes  
4       the index information; and  
5           the server extracting code information corresponding to the index information  
6       and providing the code information to the user computer.

1           12.   An advertising service apparatus comprising:  
2       a program wherein an algorithm for encoding and decoding code information  
3       is implemented;  
4       an advertiser interface which is connected to an advertiser computer through  
5       a communication network, transmits the encoding program in response to the  
6       request from the advertiser computer, receiving address information related to an  
7       advertisement from the advertiser, and assigning index information corresponding to  
8       the address information;  
9       a user interface which is connected to a user computer through a  
10      communication network, transmits the decoding program in response to the request  
11      from the user computer, extracting code information from a code image transmitted  
12      from the user computer, and providing the code image to the user computer; and  
13      a database for storing the address information and index information  
14      assigned corresponding to the address information,  
15      wherein the user computer is allowed to receive advertising services related  
16      to the advertisement according to the address information or index information.

1           13.   The advertising service apparatus of claim 12, wherein the advertiser  
2       interface further comprises an image converting means for converting the address  
3       information or index information into a code image physically or electronically  
4       represented, by encoding the address information or index information.

5  
14. An advertising service apparatus comprising:

2 a data processing unit for processing data by an algorithm for encoding and  
3 decoding data;

4 an image generating unit for generating a code image physically or  
5 electronically represented by the encoding algorithm, using address information  
6 related to an advertisement as code information;

7 a data generating unit for generating code data by converting the code image  
8 generated in the image generating unit into computer readable data; and

9 a service providing unit for extracting code information by decoding the code  
10 data generated in the data generating unit by the decoding algorithm, and providing  
11 advertising services related to the advertisement according to the address  
information set by the code information.

12  
15. The advertising service apparatus of claim 14, wherein the data  
1 processing unit further comprises a database for storing the address information and  
2 index information corresponding to the address information and if code information  
3 input to the service providing unit is index information, the service providing unit  
4 receives address information, which is stored in the database referred to by the  
5 index information.

16. An advertising method comprising the steps of:

1 assigning index information related to address information for providing  
2 advertising services;

3 storing the address information and index information;

4 converting the index information into a code image which can be physically or  
5 electronically represented, by encoding the index information by an encoding  
6 algorithm; and

7 generating an advertising image wherein the code image is physically or  
8 electronically represented together with the content image related to the  
9 advertisement.

1           17. A computer readable recording medium which stores a program for  
2 executing a method, wherein the method comprises the steps of:

3                 the advertiser transmitting address information for providing services of a  
4 predetermined advertisement to a server;

5                 the server assigning index information to the address information and storing  
6 the address information and index information; and

7                 converting the address information or index information into a code image,  
8 which can be physically or electronically represented, by encoding the address  
9 information or index information using an encoding algorithm provided from the  
10 server.

1           18. A computer readable recording medium which stores a program for  
2 executing a method, wherein the method comprises the steps of:

3                 converting a code image related to an advertisement into computer readable  
4 code data;

5                 decoding the code data by a decoding algorithm and extracting code  
6 information contained in the code image; and

7                 executing a service program according to the code information and providing  
8 services preset for the advertisement.

1           19. A computer readable recording medium which stores a program for  
2 executing a method, wherein the method comprises the steps of:

3                 assigning index information related to address information for providing  
4 advertising services;

5                 storing the address information and index information;

6                 converting the index information into a code image which can be physically or  
7 electronically represented, by encoding the index information by an encoding  
8 algorithm; and

9                 generating an advertising image wherein the code image is physically or  
10 electronically represented together with the content image related to the  
11 advertisement.